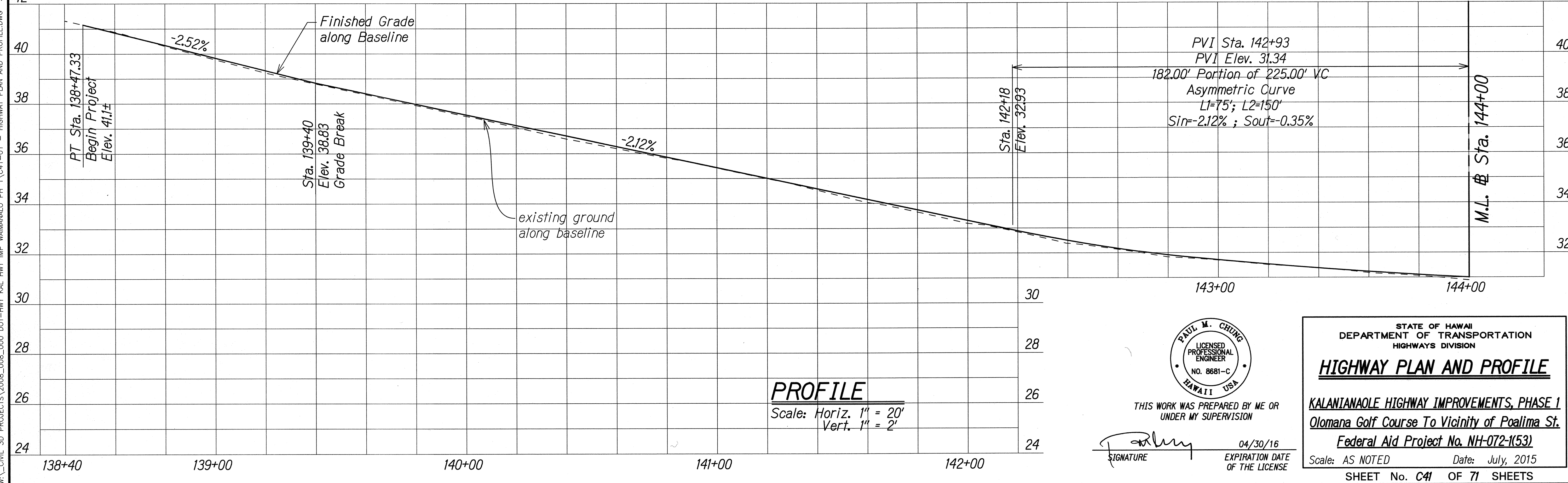
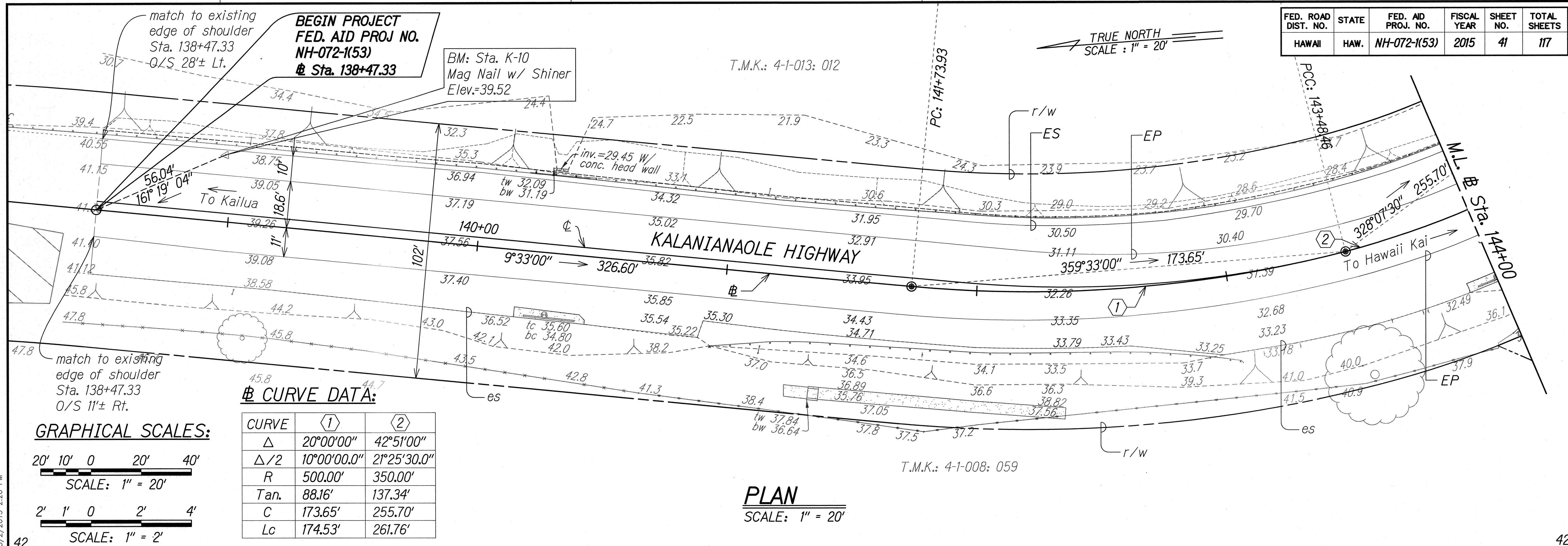


FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-072-1(53)	2015	41	117



SURVEY PLOTTED BY	DATE
DRAWN BY	
DESIGNED BY	
QUANTITIES BY	
CHECKED BY	
NO.	

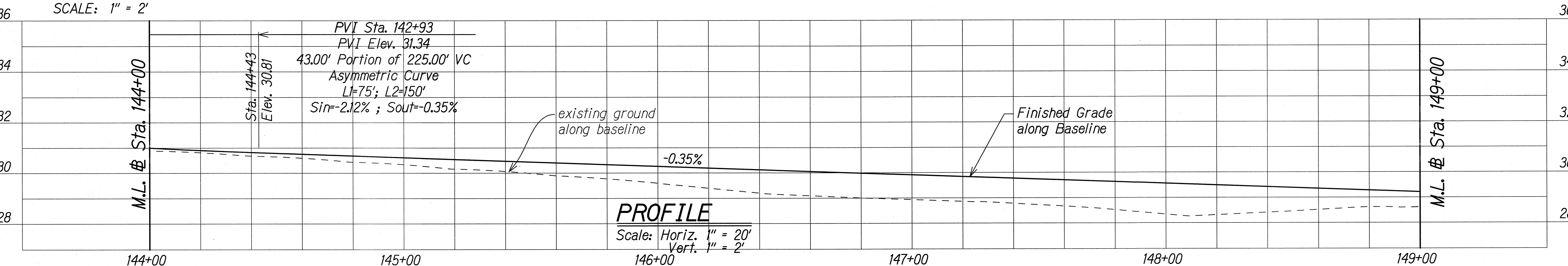
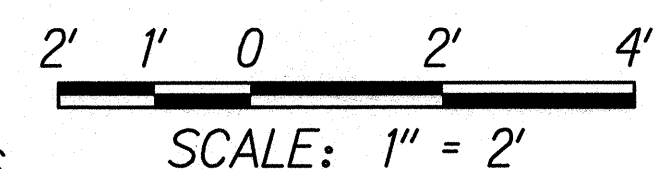
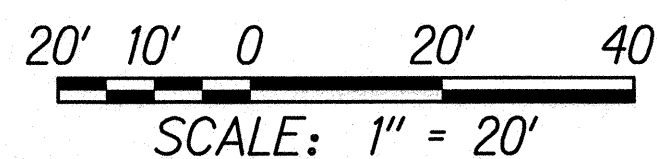
W:\CIVIL 3D PROJECTS\2008_008_000 DOT-HWY KAL HWY IMP WAIMANALO PH 1\C41-01 - HIGHWAY PLAN AND PROFILE.DWG 3/2/2015 2:20 PM

CURVE DATA:

CURVE	①
Δ	42°51'00"
$\Delta/2$	21°25'30.0"
R	350.00'
Tan.	137.34'
C	255.70'
Lc	261.76'

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-072-1(53)	2015	42	117

GRAPHICAL SCALES:



LINE DATA:

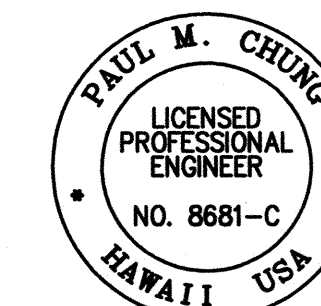
LINE	①	②	③	④	⑤	⑥	⑦	⑧
Az	215°57'43"	215°57'43"	215°57'43"	215°57'43"	36°42'00"	36°42'00"	35°57'43"	35°57'43"
Distance	10.50'	12.49'	17.04'	20.00'	2.97'	3.05'	14.63'	12.00'

CURVE DATA:

CURVE	①	②	③	④	⑤	⑥	⑦	⑧	⑨	⑩	⑪
Δ	92°04'01"	89°02'06"	90°57'54"	90°16'42"	88°49'01"	86°49'13"	89°45'30"	90°14'30"	89°01'13"	180°00'00"	90°46'09"
$\Delta/2$	46°02'00.5"	44°31'03.0"	45°28'57.0"	45°08'21.0"	44°24'30.4"	43°24'36.6"	45°52'44.9"	45°07'15.1"	44°30'36.4"	90°00'00"	45°23'04.5"
R	5.00'	5.00'	10.00'	10.00'	8.00'	8.00'	5.00'	5.00'	8.00'	2.50'	15.00'
Tan.	5.18'	4.92'	10.17'	10.05'	7.84'	7.57'	4.98'	5.02'	7.86'	N/A	15.20'
C	7.20'	7.01'	14.26'	14.18'	11.20'	11.00'	7.06'	7.09'	11.22'	5.00'	21.36'
Lc	8.03'	7.77'	15.88'	15.76'	12.40'	12.12'	7.83'	7.88'	12.43'	7.85'	23.76'

NOTE:

In areas where HMAB is less than 3", only HMA Mix IV shall be used.



THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

SIGNATURE

04/30/16
EXPIRATION DATE OF THE LICENSE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

HIGHWAY PLAN AND PROFILE

KALANIANA'OLE HIGHWAY IMPROVEMENTS, PHASE 1
Olomana Golf Course To Vicinity of Poalima St.
Federal Aid Project No. NH-072-1(53)

Scale: AS NOTED Date: July, 2015

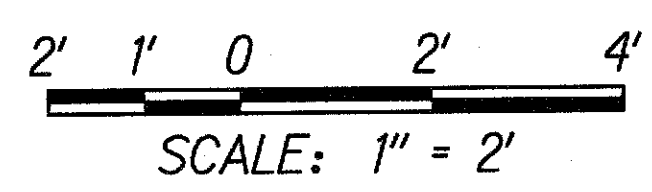
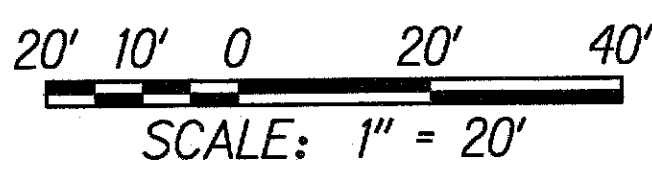
SHEET No. C42 OF 71 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-072-1(53)	2015	C.O. 43	117

W:_CIVIL 3D PROJECTS\2008_008_000 DOT-Hwy IMP WAIMANALO PH 1\AS BUILT PLANS\CAD\C43-03 - HIGHWAY PLAN AND PROFILE.DWG 3/3/2020 5:37 PM

ORIGINAL PLAN	DATE
DESIGNED BY	
CHECKED BY	
QUANTITIES BY	
NO.	

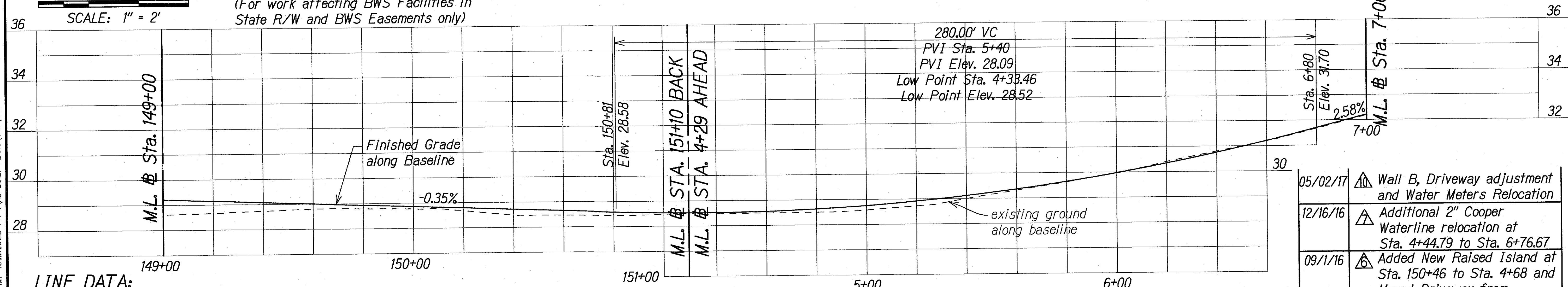
GRAPHICAL SCALES:



APPROVED: T.M.K.: 4-1-008: 015

MANAGER AND CHIEF ENGINEER, BWS
(For work affecting BWS Facilities in
State R/W and BWS Easements only)

DATE



LINE DATA:

LINE	①	②	③	④	⑤	⑥	⑦	⑧	⑨
AZ	216°43'06"	216°43'06"	216°42'00"	216°42'00"	216°42'00"	216°42'00"	216°42'00"	125°43'27"	306°42'00"
Distance	22.71'	22.43'	15.69'	15.43'	12.89'	12.40'	12.10'	100.01'	99.99'

CURVE DATA:

CURVE	①	②	③	④	⑤	⑥	⑦	⑧	⑨	⑩	⑪
Δ	89°14'16"	90°45'44"	89°15'22"	90°44'38"	88°43'04"	91°16'56"	47°14'39"	55°08'42"	90°00'00"	180°13'11"	180°00'00"
Δ/2	44°37'07.9"	45°22'52.1"	44°37'41.0"	45°22'19.0"	44°21'32.0"	45°38'28.0"	23°37'19.4"	27°34'21.2"	45°00'00.0"	90°06'35.5"	90°00'00.0"
R	6.00'	6.00'	5.00'	5.00'	5.00'	5.00'	18.00'	14.53'	5.00'	1.47'	2.32'
Tan.	5.92'	6.08'	4.94'	5.07'	4.89'	5.11'	7.87'	7.59'	5.00'	767.94'	N/A
C	8.43'	8.54'	7.03'	7.12'	7.00'	7.15'	14.42'	13.45'	7.07'	2.94'	4.63'
Lc	9.34'	9.50'	7.79'	7.92'	7.74'	7.97'	14.84'	13.98'	7.85'	4.63'	7.28'

PROFILE

Scale: Horiz. 1" = 20'
Vert. 1" = 2'

NOTE:

In areas where HMAB is less than 3", only HMA Mix IV shall be used.

DATE	REVISION
05/02/17	Wall B, Driveway adjustment and Water Meters Relocation
12/16/16	Additional 2" Cooper Waterline relocation at Sta. 4+44.79 to Sta. 6+76.67
09/1/16	Added New Raised Island at Sta. 150+46 to Sta. 4+68 and Moved Driveway from Sta. 5+76 to Sta. 6+00

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

HIGHWAY PLAN AND PROFILE

KALANIANA'OLE HIGHWAY IMPROVEMENTS, PHASE 1
Olomana Golf Course To Vicinity of Poalima St.
Federal Aid Project No. NH-072-1(53)

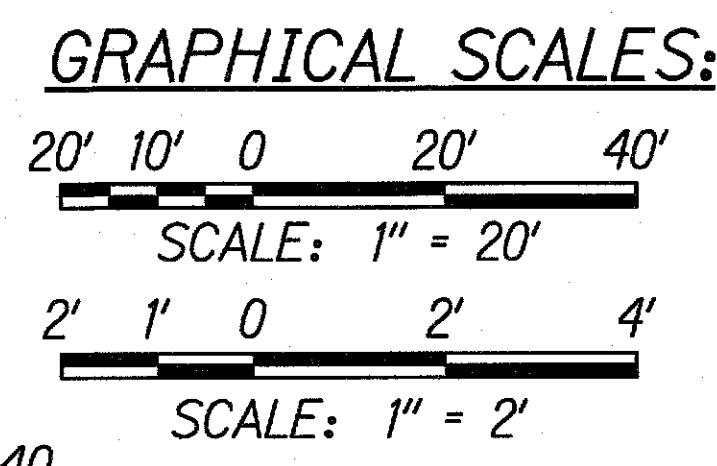
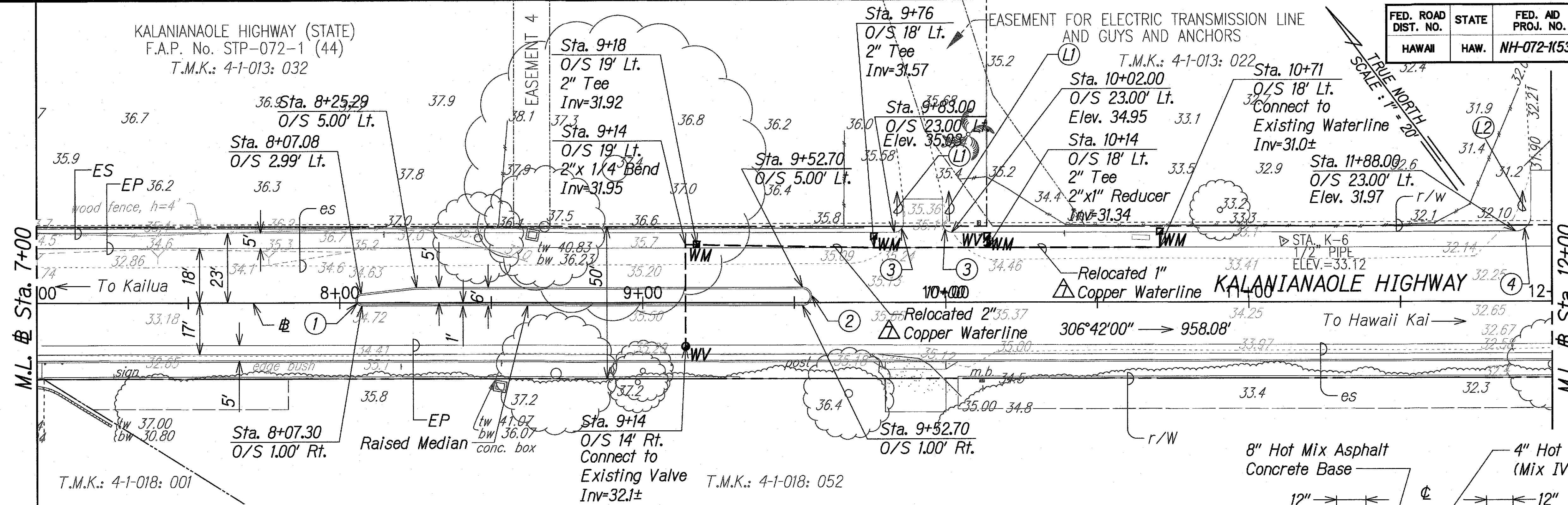
Scale: AS NOTED Date: March, 2019

SHEET No. C43 OF 73 SHEETS

"AS-BUILT"

C.O. 43

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-072-K(53)	2015	C.O. 44	117

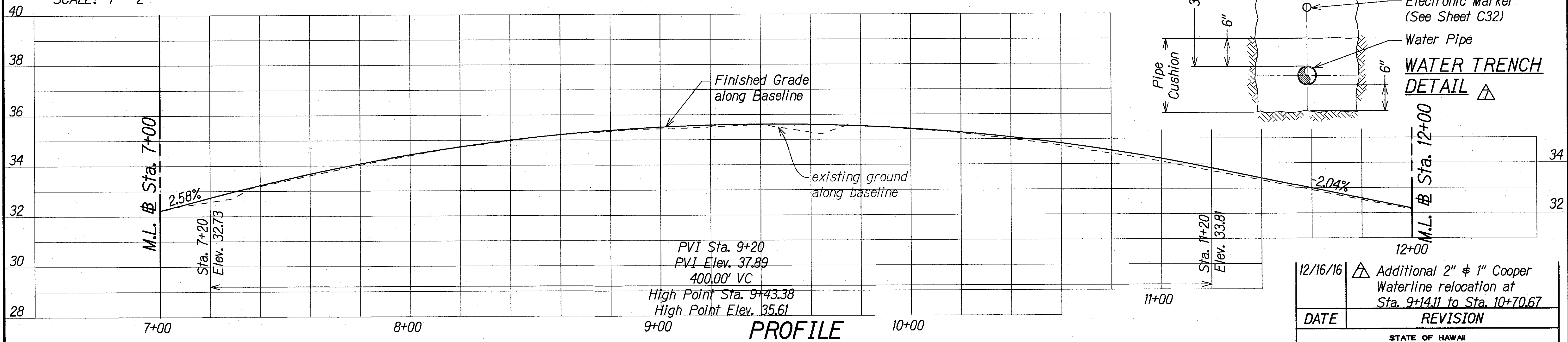
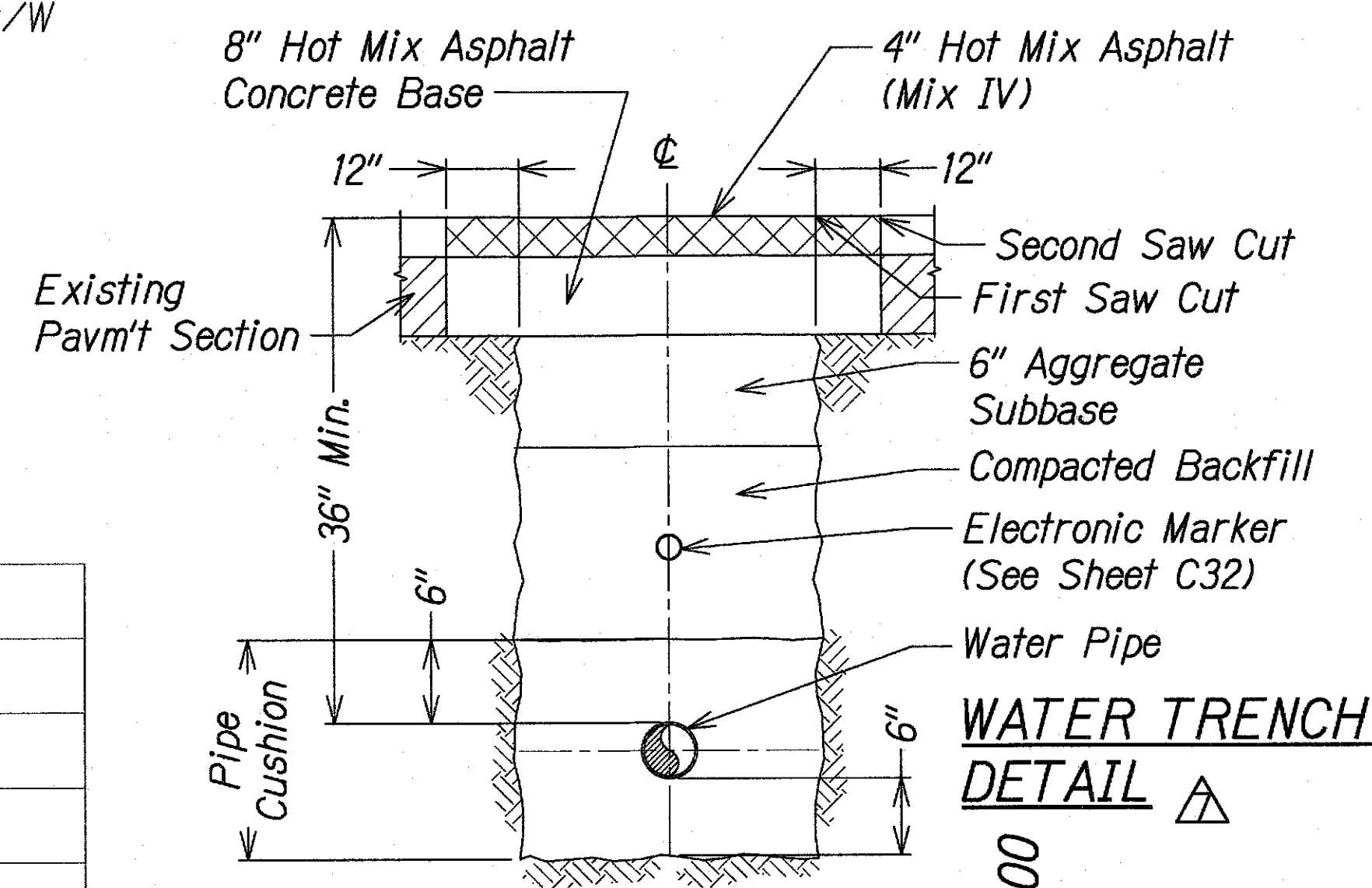


LINE DATA:

LINE	①	②
Az	216°42'00"	216°42'00"
Distance	8.00'	15.00'

PLAN

SCALE: 1" = 20'



CURVE DATA:

CURVE	①	②	③	④
Δ	173°41'37"	180°00'00"	90°00'00"	90°00'00"
Δ/2	86°50'48.5"	90°00'00.0"	45°00'00.0"	45°00'00.0"
R	2.00'	3.00'	3.00'	5.00'
Tan.	36.30'	N/A	3.00'	5.00'
C	4.00'	6.00'	4.24'	7.07'
Lc	6.06'	9.42'	4.71'	7.85'

APPROVED:

MANAGER AND CHIEF ENGINEER, BWS
(For work affecting BWS Facilities in
State R/W and BWS Easements only)

DATE

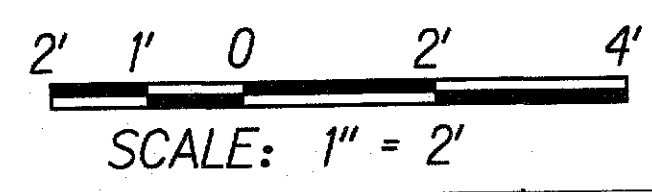
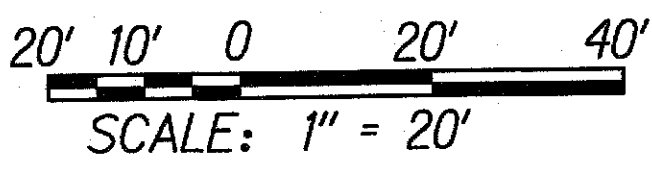
12/16/16	Δ Additional 2" & 1" Cooper Waterline relocation at Sta. 9+14.11 to Sta. 10+70.67
DATE	REVISION
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION	
HIGHWAY PLAN AND PROFILE	
KALANIANA'OLE HIGHWAY IMPROVEMENTS, PHASE 1 Olomana Golf Course To Vicinity of Poalima St. Federal Aid Project No. NH-072-K(53)	
Scale: AS NOTED	Date: March, 2019
SHEET No. C44 OF 73 SHEETS	

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-072-1(53)	2015	C.O. 45	117

W:\CIVIL 3D PROJECTS\2008_008_000 DOT-HWY KAL HWY IMP WAMAWALO PH 1\AS BUILT PLANS\CAD\C45-05 - HIGHWAY PLAN AND PROFILE.DWG 3/13/2019 12:03 PM

DATE	_____
DESIGNED BY	_____
TRACED BY	_____
DESIGNED BY	_____
NOTE BOOK	_____
QUANTITIES BY	_____
CHECKED BY	_____
No.	_____

GRAPHICAL SCALES:



CURVE DATA:

CURVE	(1)
Δ	27°37'00"
$\Delta/2$	13°48'30.0"
R	600.00'
Tan.	147.47'
C	286.41'
Lc	289.20'

CURVE DATA:

CURVE	(1)
Δ	90°00'00"
$\Delta/2$	45°00'00.0"
R	5.00'
Tan.	5.00'
C	7.07'
Lc	7.85'

LINE DATA:

LINE	(1)
Az	216°42'00"
Distance	15.10'

PLAN

SCALE: 1" = 20'

PROFILE

Scale: Horiz. 1" = 20'
Vert. 1" = 2'

03/08/19 Revised Striping Layout

DATE REVISION

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

HIGHWAY PLAN AND PROFILE

KALANIANA'OLE HIGHWAY IMPROVEMENTS, PHASE 1
Olomana Golf Course To Vicinity of Poalima St.

Federal Aid Project No. NH-072-1(53)

Scale: AS NOTED Date: March, 2019

SHEET No. C45 OF 73 SHEETS

"AS-BUILT"

C.O. 45

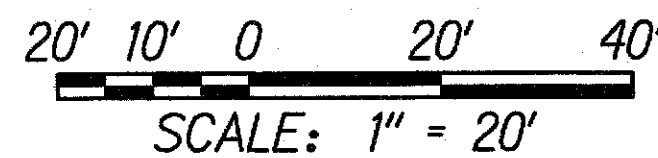
LINE DATA: Δ 16

LINE	(L1)	(L2)	(L3)	(L4)	(L5)	(L6)
Az	279°05'00"	234°05'00"	99°05'00"	99°05'00"	234°05'00"	279°05'00"
Distance	18.81'	5.66'	22.81'	6.59'	5.66'	2.59'

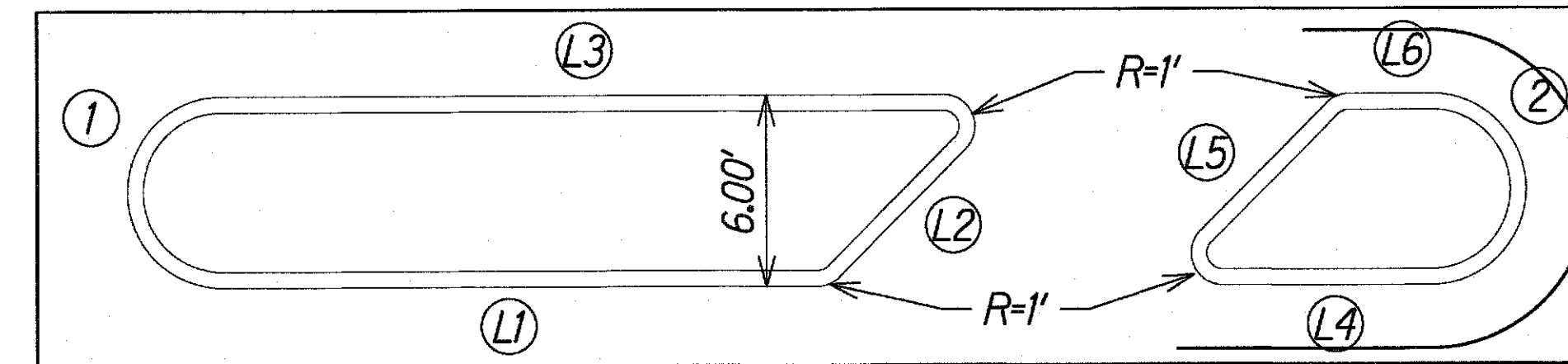
CURVE DATA: Δ

CURVE	(1)
Δ	180°00'00"
$\Delta/2$	90°00'00.0"
R	3.00'
Tan.	N/A
C	6.00'
Lc	9.42'
CURVE	(2)
Δ	180°00'00"
$\Delta/2$	90°00'00.0"
R	3.00'
Tan.	N/A
C	6.00'
Lc	9.42'

GRAPHICAL SCALES:



FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-072-1(53)	2015	C.O. 46	117



INSET A

SCALE: 1" = 5'

T.M.K.: 4-1-013: 030
Relocate Bus Stop Near Saddle City Road Intersection Δ

M.L. # Sta. 17+00

M.L. # Sta. 22+00

T.M.K.: 4-1-028: 092

T.M.K.: 4-1-028: 091

T.M.K.: 4-1-028: 090

T.M.K.: 4-1-028: 089

T.M.K.: 4-1-028: 088

T.M.K.: 4-1-028: 087

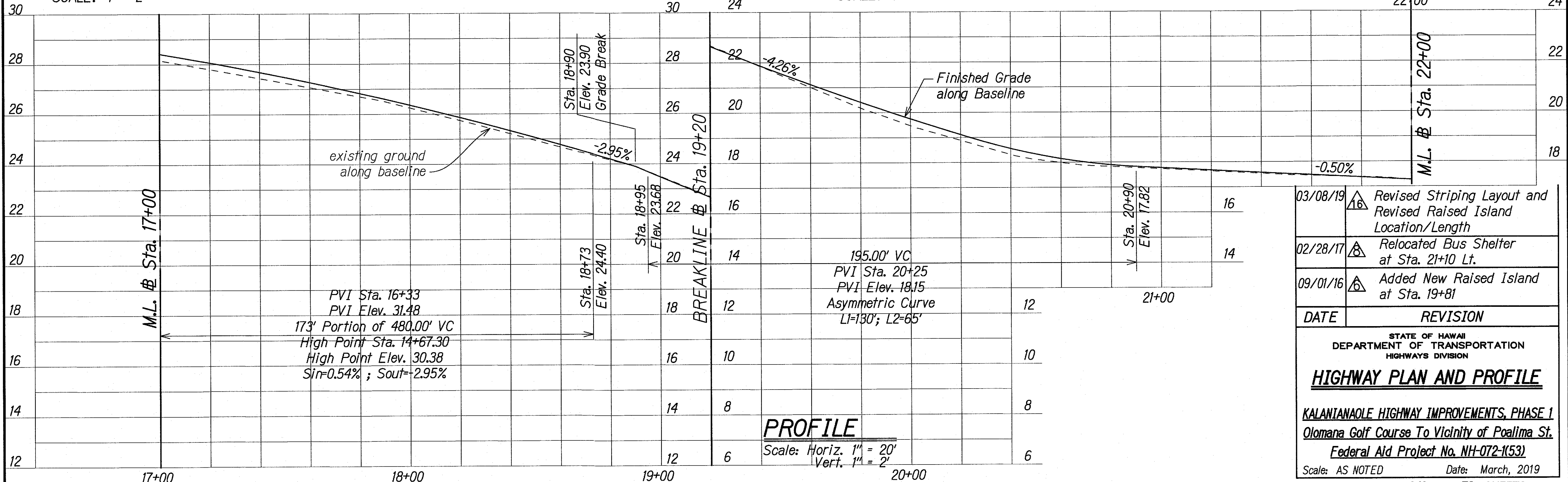
T.M.K.: 4-1-022: 088

T.M.K.: 4-1-022: 087

KALANIANA'OLE HIGHWAY

PLAN

SCALE: 1" = 20'



PROFILE

Scale: Horiz. 1" = 20'
Vert. 1" = 2'

03/08/19	Δ 16	Revised Striping Layout and Revised Raised Island Location/Length
02/28/17	Δ 16	Relocated Bus Shelter at Sta. 21+10 Lt.
09/01/16	Δ 16	Added New Raised Island at Sta. 19+81

DATE	REVISION
------	----------

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
HIGHWAY PLAN AND PROFILE
KALANIANA'OLE HIGHWAY IMPROVEMENTS, PHASE 1
Olomana Golf Course To Vicinity of Poalima St.
Federal Aid Project No. NH-072-1(53)
Scale: AS NOTED Date: March, 2019
SHEET No. C46 OF 73 SHEETS

"AS-BUILT"

C.O. 46

W:\CIVIL 3D PROJECTS\2008_008_000 DOT-HWY KAL HWY IMP WAIMANALO PH 1\AS BUILT PLANS\CAD\C46-06 - HIGHWAY PLAN AND PROFILE.DWG 3/3/2020 5:48 PM

ORIGINAL PLAN	DATE
DRAWN BY	
DESIGNED BY	
NOTED BY	
CHECKED BY	
NO.	

LINE DATA: A

LINE	(L1)	(L2)
Az	106°12'30"	279°06'00"
Distance	32.20'	32.20'

T.M.K.: 4-1-013: 030

CURVE DATA: A

CURVE	(1)
Δ	187°06'30"
Δ/2	93°33'15.1"
R	3.00'
Tan.	48.30'
C	5.99'
Lc	9.80'
CURVE	(2)
Δ	172°53'30"
Δ/2	86°26'44.9"
R	1.00'
Tan.	16.10'
C	2.00'
Lc	3.02'

T.M.K.: 4-1-015: 001

T.M.K.: 4-1-015: 001

T.M.K.: 4-1-015: 001

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-072-1(53)	2015	C.O. 47	117

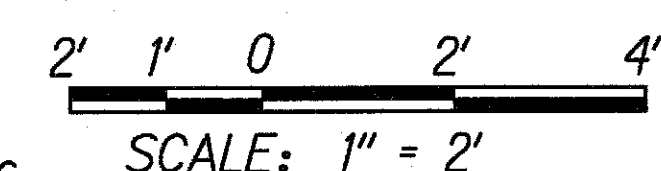
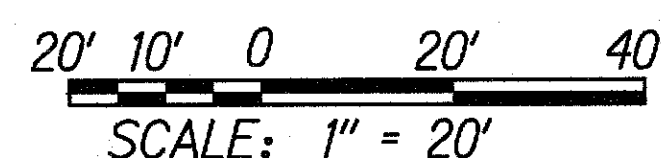
TRUE NORTH
SCALE: 1" = 20'

Hughes Road
(Akebono Gate)

M.L. # Sta. 22+00

M.L. # Sta. 27+00

GRAPHICAL SCALES:



PLAN

SCALE: 1" = 20'

M.L. # Sta. 22+00

M.L. # Sta. 27+00

PVI Sta. 24+96
PVI Elev. 15.79
240.00' VC
LOW POINT Sta. 24+11.57
LOW POINT ELEV. 16.40
Asymmetric Curve
L1=160'; L2=80'

PROFILE

Scale: Horiz. 1" = 20'
Vert. 1" = 2'

03/08/19 Revised Striping Layout and Revised Raised Island Location/Length

09/01/16 Added New Raised Island at Sta. 23+60 to Sta. 23+96

DATE REVISION

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

HIGHWAY PLAN AND PROFILE

KALANIANA'OLE HIGHWAY IMPROVEMENTS, PHASE 1
Olomana Golf Course To Vicinity of Poalima St.
Federal Aid Project No. NH-072-1(53)

Scale: AS NOTED Date: March, 2019

SHEET No. C47 OF 73 SHEETS

"AS-BUILT"

C.O. 47

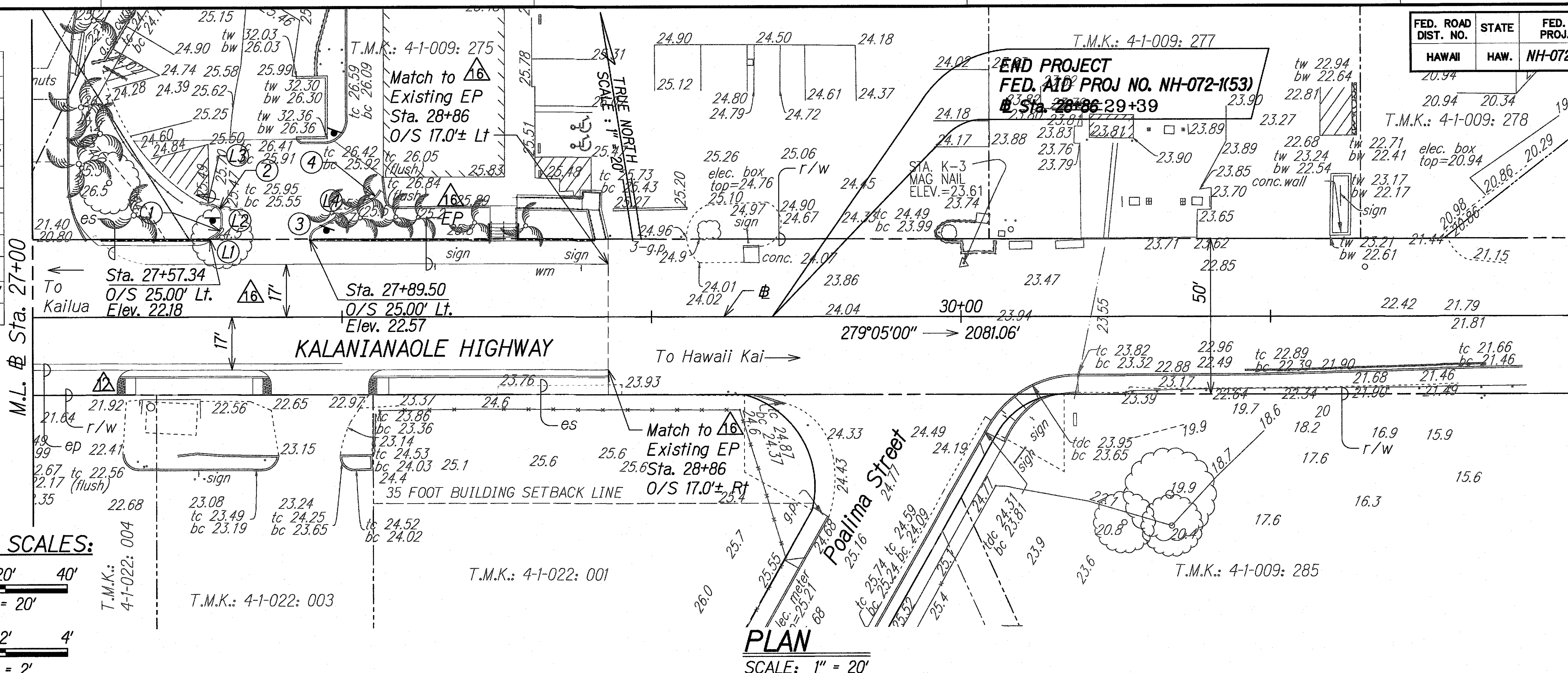
W:\CIVIL 3D PROJECTS\2008_008_000 DOT-HWY KAL HWY IMP WAIMANALO PH 1\AS BUILT PLANS\CAD\47-07 - HIGHWAY PLAN AND PROFILE.DWG 3/3/2020 5:51 PM

ORIGINAL PLAN	DATE
DESIGNED BY	
TRACED BY	
NOTE BOOK	
QUANTITIES BY	
CHECKED BY	

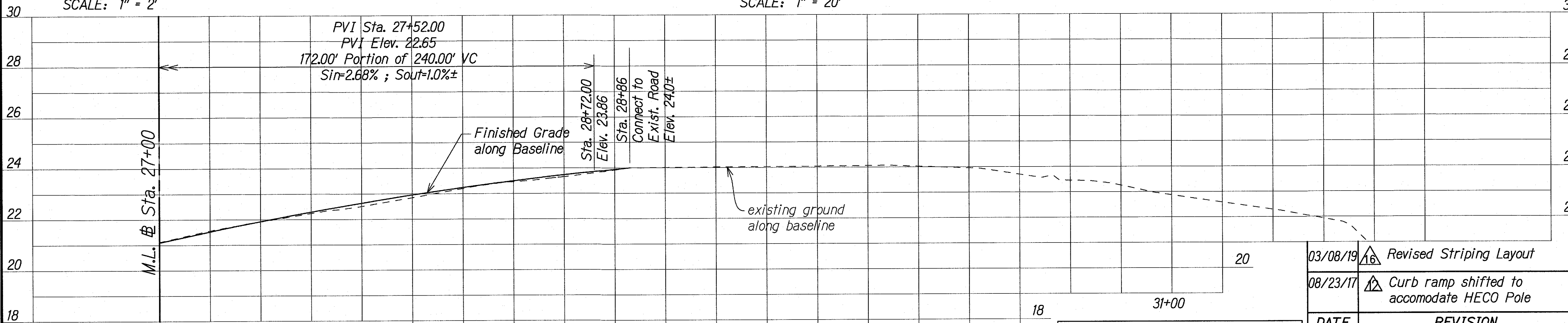
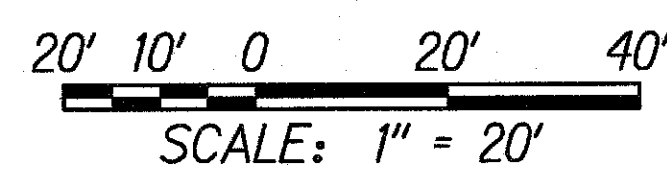
LINE DATA:

LINE	(L1)
Az	249°06'00"
Distance	1.73'
LINE	(L2)
Az	189°06'00"
Distance	2.05'
LINE	(L3)
Az	110°29'53"
Distance	3.97'
LINE	(L4)
Az	251°48'49"
Distance	19.32'

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-072-1(53)	2015	C.O. 48	117



GRAPHICAL SCALES:



CURVE DATA:

CURVE	(1)	(2)	(3)	(4)
Δ	60°00'00"	78°36'07"	62°42'50"	36°59'11"
$\Delta/2$	30°00'00.0"	39°18'03.5"	18°29'35.5"	18°29'35.5"
R	5.00'	4.00'	4.00'	7.50'
Tan.	2.89'	3.27'	2.44'	2.51'
C	5.00'	5.07'	4.16'	4.76'
Lc	5.24'	5.49'	4.38'	4.84'

LEGEND FOR AS-BUILT POSTINGS

~~~~~	Squiggly line for as-built deletion
==	Double line for as-built deletion
Roadway	Text for as-built posting

03/08/19	Revised Striping Layout
08/23/17	Curb ramp shifted to accomodate HECO Pole
DATE	REVISION
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION	
<b>HIGHWAY PLAN AND PROFILE</b>	
KALANIANA'OLE HIGHWAY IMPROVEMENTS, PHASE 1 Olomana Golf Course To Vicinity of Poalima St.	
Federal Aid Project No. NH-072-1(53)	
Scale: AS NOTED	Date: March, 2019
SHEET No. C48 OF 73 SHEETS	

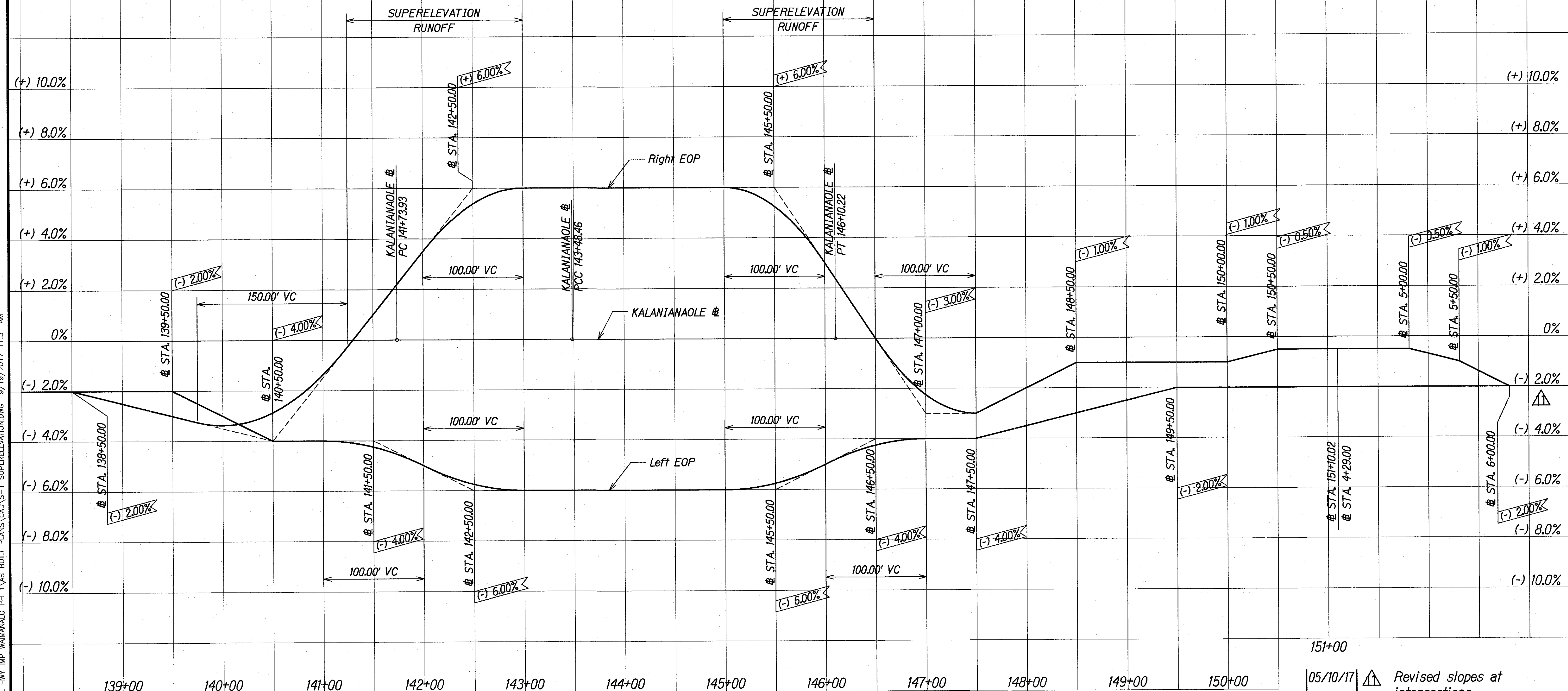
"AS-BUILT"

C.O. 48

W:\CIVIL 3D PROJECTS\2008_008_000 DOT-HWY KAL HWY IMP WAINALOA PH 1\AS BUILT PLANS\CAD\C48-08 - HIGHWAY PLAN AND PROFILE.DWG 3/3/2020 5:58 PM

DESIGNED BY	DATE
CHECKED BY	
NOTED BY	
TRACED BY	
QUANTITIES BY	
NO.	

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-072-1(53)	2015		



**KALANIANA'OLE # 138+50 TO KALANIANA'OLE # 148+00**  
 Scale: Horiz. 1" = 50'  
 Vert. 1" = 2.00%

05/10/17	Revised slopes at intersections
REVISION	
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION	
<b>SUPERELEVATION DIAGRAM 1</b>	
KALANIANA'OLE HIGHWAY IMPROVEMENTS, PHASE 1 Olomana Golf Course To Vicinity of Poalima St. Federal Aid Project No. NH-072-1(53)	
Scale: AS NOTED	Date: March, 2019
SHEET No. 1 OF 2 SHEETS	

"AS-BUILT"

C.O. 48S-1

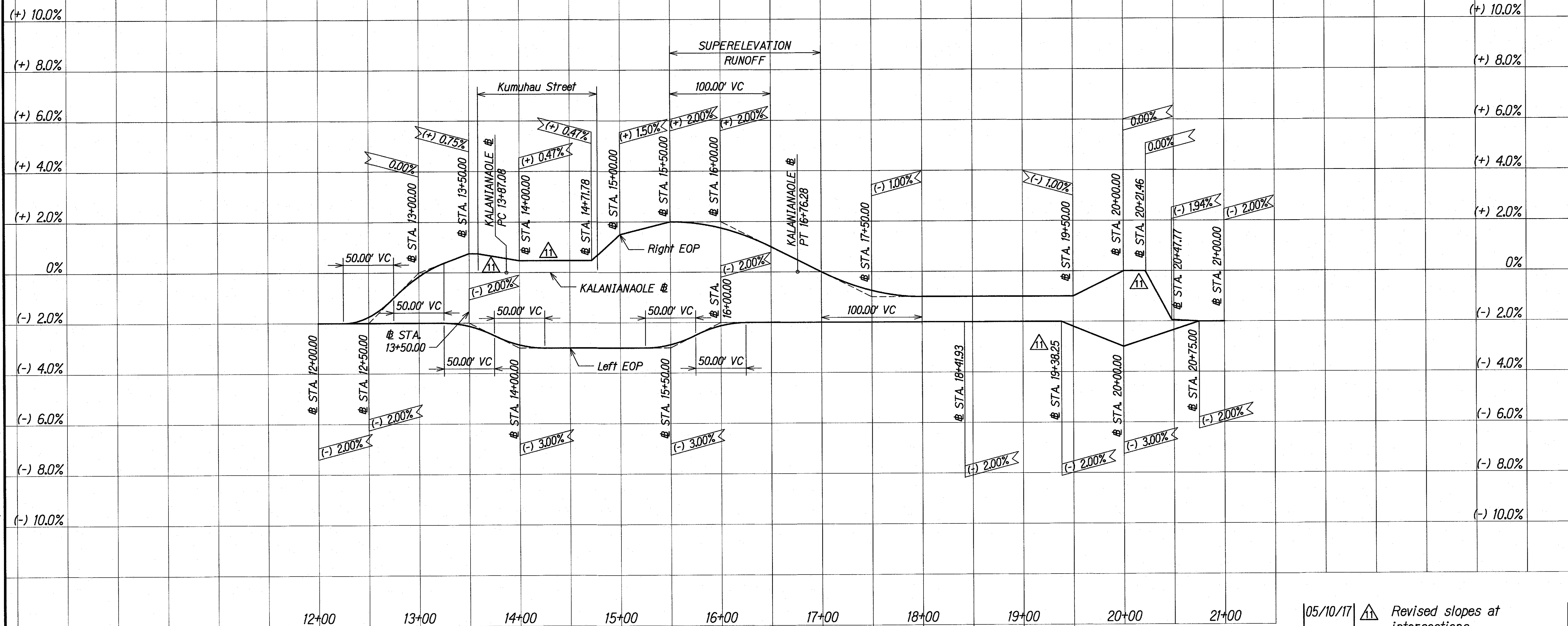
ORIGINAL PLAN	DATE
NOTE BOOK	
DESIGNED BY	
CHECKED BY	

W:\CIVIL 3D PROJECTS\2008_008_000 DOT-HWY KAL HWY IMP WAIMANALO PH 1\AS BUILT PLANS\CAD\5-1 SUPERELEVATION.DWG 9/19/2017 11:31 AM

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-072-K(53)	2015		

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTE BOOK	DRAWN BY	
No.	TRACED BY	
	DESIGNED BY	
	CHECKED BY	

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**KALANIANA'OLE # 12+00 TO KALANIANA'OLE # 19+00**  
 Scale: Horiz. 1" = 50'  
 Vert. 1" = 2.00%

05/10/17	△ Revised slopes at intersections
REVISION	
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION	
<b>SUPERELEVATION DIAGRAM 2</b>	
KALANIANA'OLE HIGHWAY IMPROVEMENTS, PHASE 1 Olomana Golf Course To Vicinity of Poalima St. Federal Aid Project No. NH-072-K(53)	
Scale: AS NOTED	Date: March, 2019
SHEET No. 1 OF 2 SHEETS	